

INTRODUCTION

The following historical record has been compiled by Intermountain Power Service Corporation to document the efforts and contributions made by many individuals and organizations, who helped to ensure the successful planning, financing, construction, operation, and maintenance of the Intermountain Power Project (Project) and related facilities.

The format for this historical record is a year-by-year review of the more notable events that have occurred at the location of the Project, near Delta, Utah, and those events that occurred elsewhere that have had an impact on the Project. A brief written description of these events has been included to show how each of the three main entities, Los Angeles Department of Water and Power (LADWP), Intermountain Power Agency (IPA), and Intermountain Power Service Corporation (IPSC) have worked in their individual areas of responsibility and as a team to make the Project the success it has become. Most of the stories or descriptions are brief and to the point; they were written this way so the reader can gain an appreciation for the many activities and events that were occurring simultaneously. A solid working relationship between the three entities based on a desire to get the job done, and done right the first time, made for an environment which kept everyone pulling in the same direction. It is this same spirit that keeps the Project moving forward today.

To those employees of IPSC, past and present, your contribution has made a difference. Your efforts to make things better, and then your desire to continue to improve the way we do business keeps IPSC competitive and on the leading edge of change. This has and will be the key to our continued success in an ever changing world. For you, this historical record may be more like a family scrap book, filled with good memories of work projects and friendships that have developed over the years.

For those who are not acquainted with the Project, some information about the electrical power generated at this plant will help to illustrate why those involved with the Project are proud to be part of, or associated with, the Intermountain Power Project. To help the reader understand the significance of this information, a listing of comparable power plant information taken from national reports has been included to allow the reader to make a general comparison.

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ELECTRICAL GENERATION

The Intermountain Generating Station (IGS) ranks as one of the top performers in the country. Due to deregulation and the current competitive climate, it is difficult to get good comparative information to rank generating stations in all the critical categories. However, some public information is available based on FERC Form1 filings. The categories available for comparison include unit size, production, productivity, performance, and expenditures.

We will limit our scope to a comparison of the western United States (Western States Coordinating Council (WSCC) region), whom are our direct competitors. We have chosen the top 25 coal-fired generating stations greater than 400 MW net for comparison. The time frame of this comparison is the 2003 calendar year, and comparison ranking information is included in the Table-WSCC Comparison Data. These tables and graphs are included in Exhibit #1. Included in this text is a table showing the rankings for net station heat rate.

Graphs mentioned in the following text, which show how the electrical generating stations in the western region compare with each other on various factors, are located in Exhibit #1.

Station Capacity Comparison Graph: IGS Units 1 and 2 are the largest coal-fired units in the west at 900 MW net each. The average coal-fired unit size is 436 MW net. IGS ranks as the sixth largest station for total combined generation at 1660 MW net. It is interesting to note that only two other power stations (Cherokee-Public Service of Colorado, 4 units 723 MW net total; and Valmy-Sierra Pacific, 2 units 532 MW net total) are able to operate at or above their original design turbine nameplate rating. This is an excellent indication of how well the units are operated and maintained to an "as new" condition.

Net Generation Rankings Graph: IGS is ranked fifth in overall production of the 25 WSCC stations with total net generation of 13,555 GWhr. The average station generation was 8,193 GWhrs.

COMPOSITE INFO FOR GRAPHING
Refer to Attachment E1-12
Sorted by Net Station Heat Rate

Ranking for Net Capacity Factor Graph: IGS is ranked first in net capacity factor at 93.3 percent. Note this is 2003 calendar year published information calculated at stated net station capacity ratings. Net capacity factor is a measure of productivity and includes the availability of the units (the amount of up time) and the net output factor (how heavily the units were loaded). The average net capacity factor for WSCC was 81.9 percent.

| Rank | PLANT | NSHR (btu/kwhr) |
|------|---------------|--------------------|
| 1 | Intermountain | 9462 |
| 2 | North Valmy | 9495 |
| 3 | Boardman | 10036 |
| 4 | Mohave | 10088 |
| 5 | Four Corners | 10112 |
| 6 | Huntington | 10149 |
| 7 | Navaho | 10197 |
| 8 | Coronado | 10210 |
| 9 | Hunter | 10219 |
| 10 | Comanche | 10286 |
| 11 | Craig | 10287 |
| 12 | Laramie River | 10333 |
| 13 | Springville | 10352 |
| 14 | Hayden | 10374 |
| 15 | Bonanza | 10440 |
| 16 | Pawnee | 10515 |
| 17 | Cherokee | 10524 |
| | | 10574 |
| 18 | Naughton | 10645 |
| 19 | Bridger | 10688 |
| 20 | Cholla | 10790 |
| 21 | Gardner | 10835 |
| 22 | San Juan | 11015 |
| 23 | Colstrip | 11116 |
| 24 | Johnston | 11250 |

Net Station Heat Rate Comparison Table and Graph: IGS overwhelmingly ranked first in operating performance at 9,462 Btu/kWhr. This category (also referred to as net station heat rate) is a measure of how well the station converts energy (in the form of coal) into electricity. The WSCC average net station heat rate was 10,574 Btu/kWhr.

Total Production Costs (ranked by Total Costs) Graph (from *Power Magazine*): IGS came in at eighth at \$13.67/MWhr. The average WSCC Total Production Costs was \$17.15/MWhr. The key point is the importance fuel cost plays on the total production costs. On average, fuel costs represents 2/3 of the total expenditures for a station.

Coal Burn Comparison: Intermountain ranks eighth in total coal burn at 5,518,000 tons of coal burn with the WSCC average being 4,455,000 tons. IGS ranks fifth in net generation and eighth in total coal burn due to the high Btu Utah coal burned at IGS.

SO2 Emissions Comparison: Operating IGS while maintaining the lowest emissions possible is as important as generation. IGS ranks second lowest in SO2 emissions at 0.047 lbs/mbtu with the average being 0.354 lbs/mbtu. IGS continues to be an industry leader in power generation with low emissions. The combination of low sulfur coal and wet scrubbing places us well below the average and less than one-tenth of the high.

NOx Emissions Comparison: IGS ranked tenth in NOx emissions at 0.374 lbs/mbtu and only slightly below the WSCC average of 0.378 lbs/mbtu. Note that difference between the high and low for NOx emission is not nearly as great as for SO2. That is because all of the stations use basically the same methods for NOx emissions and the variations are caused by the differences in fuel to generate NOx.

Production Trends: The Intermountain Power Service Corporation's (IPSC's) performance and productivity improvements have simply been remarkable. Normally, one would expect a gradual downward trend of production, productivity, performance, availability, and expenditures correlating to an increase in age. The opposite has been true at the Intermountain Generating Station (IGS). Even with the plant uprate in capacity, we have been able to maintain high availability and record generation.

IGS is a base-loaded station dispatched by the Los Angeles Department of Water and Power at a rated capacity of 1660 MW net. In 1994-1995 and 1995-1996, however, this wasn't the case. IPSC prompted several meetings to convince managers that it was indeed economically justifiable to run these units base loaded or at rated capacity. The kicker was the fixed quantity of high priced coal that had long term contracts. The units had to be dispatched to burn the required amount of contracted coal which was at roughly 75 percent capacity. Operating above this threshold allowed the Operating Agent to purchase spot market coal at the lowest price possible. This allowed the overall weighted average cost of coal to start dropping off, making the station more cost effective.

The IGS generates electricity and does it efficiently and reliably. For example, the amount of electricity generated at IGS on a normal day, makes up one third or more of the electrical power required by the Los Angeles Department of Water and Power. At the same time, IGS is supplying up to one half of the power needs of the other five California participants.

IGS Production Comparison

| Year | | Record High Production Fiscal Years | | | | | | | | | Record Low Production | |
|---------------------------------|----------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------------------------|--|
| | | 89-90 | 96-97 | 97-98 | 98-99 | 99-00 | 00-01 | 01-02 | 02-03 | 03-04 | 95-96 | |
| Gross Generation | GWH | 13,410 | 13,365 | 13,635 | 13,956 | 13,858 | 14,078 | 13,995 | 14,096 | 15,021 | 10,386 | |
| Net Generation | GWH | 12,724 | 12,681 | 12,928 | 13,235 | 13,123 | 13,328 | 13,251 | 13,326 | 14,178 | 9,786 | |
| Adjusted Coal Burn* | Ktons | 5,080 | 5,113 | 5,186 | 5,294 | 5,250 | 5,345 | 5,340 | 5,401 | 5,778 | 3,981 | |
| Coal Heating Value | Btu/lb | 12,025 | 11,775 | 11,822 | 11,851 | 11,930 | 11,850 | 11,824 | 11,733 | 11,694 | 11,826 | |
| Adjusted Net Station Heat Rate* | Btu/kwhr | 9,616 | 9,502 | 9,491 | 9,485 | 9,551 | 9,510 | 9,536 | 9,517 | 9,535 | 9,635 | |
| Availability Factor | % | 95.12 | 93.55 | 94.76 | 94.09 | 93.30 | 93.78 | 93.69 | 92.70 | 94.13 | 87.91 | |
| Equivalent Availability Factor | % | 94.99 | 93.42 | 94.64 | 93.93 | 92.39 | 93.55 | 93.25 | 92.19 | 93.62 | 87.30 | |
| Forced Outage Rate | % | 0.58 | 0.64 | 0.12 | 0.68 | 0.87 | 1.17 | 0.95 | 1.09 | 1.16 | 0.19 | |
| Equiv Unplanned Outage Rate | % | 1.22 | 1.37 | 0.61 | 1.07 | 0.99 | 1.37 | 1.44 | 1.18 | 1.49 | 0.97 | |
| Net Capacity Factor | % | 90.78 | 87.82 | 89.26 | 91.38 | 90.27 | 91.65 | 90.98 | 89.75 | 91.55 | 68.21 | |
| Net Output Factor | % | 95.62 | 93.90 | 94.21 | 97.20 | 96.76 | 97.73 | 97.11 | 96.82 | 97.26 | 77.62 | |

*Adjusted Coal Inventory applies annual coal pile inventory corrections back over multiple years.

Denotes Record Highs

Denotes Record Lows

Additional production information and charts that show historical year-end values for related production indicators at the Intermountain Generating Station are located in Exhibit #1.